

Remarks

In the outstanding Official Action, the Examiner:

(1) indicated Figures 1 and 2 should be designated by a legend such as -- Prior Art -- because only that which is old is illustrated;

(2) rejected claims 1, 2, 5, and 6 under 35 USC 102(e) as being anticipated by Munks et al.; and

(3) rejected claims 3 and 4 under 35 USC 103(a) as being unpatentable over Munks et al. in view of Mooradian and further in view of Camparo et al.

In response to Item 1 above, Applicant respectfully traverses the objection to Figs. 1 and 2 that the drawings should be designated by a legend such as -- Prior Art -- because only that which is old is illustrated. Inasmuch as Applicant may make a priority claim to each one of the applications containing the subject matter illustrated in Figs. 1 and 2, Applicant believes that this subject matter is not prior art with respect to the above-identified patent application. Reconsideration is respectfully requested.

With respect to Item 2 above, Applicant respectfully traverses the rejection of claims 1, 2, 5, and 6 under 35 USC 102(e) as being anticipated by Munks et al.

Independent claim 1 of the present invention comprises wavelength stabilizing apparatus for use in stabilizing the wavelength of a tunable laser to a target wavelength, the wavelength stabilizing apparatus comprising a wavelength measuring module for detecting a difference between an instantaneous wavelength of the laser and the target wavelength, and for generating an output signal which is representative of

the difference, wherein the target wavelength is selected from a range of wavelengths corresponding to a tuning voltage applied across a top electrode and a bottom electrode of the tunable laser.

Independent claim 5 of the present invention comprises a laser system comprising a wavelength stabilizing apparatus for use in stabilizing the wavelength of the tunable laser to a tunable wavelength, the wavelength stabilizing apparatus comprising a wavelength measuring mode for detecting the difference between an instantaneous wavelength of the laser and the target wavelength, and for generating an output signal which is representative of the difference, wherein the target wavelength is selected from a range of wavelengths corresponding to a tuning voltage applied across a top electrode and a bottom electrode of the tunable laser.

Independent claim 6 of the present invention comprises a method for stabilizing the wavelength of a tunable laser to a target frequency, the method comprising determining a target wavelength of the tunable laser from a range of wavelengths corresponding to a tuning voltage applied across a top electrode and a bottom electrode of the tunable laser, and detecting a difference between an instantaneous wavelength of the laser and the target wavelength, and generating an output signal which is representative of the difference.

Applicant believes that Munks et al. disclose a method and apparatus for monitoring and control of laser emission wavelength including a wavelength monitoring apparatus which produces an error signal based on the deviation of the wavelength of the beam from a selected set-point wavelength. Applicant further believes that Munks et al. disclose a tuning range of wavelengths over

which a unique error signal is produced relative to a selected set-point wavelength for monitoring and controlling the wavelength of the laser.

Applicant believes that Munks et al. does not disclose a wavelength measuring module for detecting the difference between an instantaneous wavelength of the laser and the target wavelength, and for generating an output signal which is representative of the difference, wherein the target wavelength is selected from a range of wavelengths based on a tuning voltage applied across a top electrode and a bottom electrode of the tunable laser. Munks et al. is believed to teach away from the present invention in that the laser is a fixed wavelength laser having a set-point wavelength rather than a tunable laser having a target wavelength corresponding to the tuning voltage applied across a top electrode and a bottom electrode of the tunable laser.

Accordingly, independent claims 1, 5, and 6 are believed to be in condition for allowance, and allowance thereof is respectfully requested.

Claim 2, which is directly dependent from claim 1, is believed to be in condition for allowance for at least the above-identified reasons. Accordingly, allowance thereof is respectfully requested.

In response to Item 3 above, Applicant respectfully traverses the rejection of claims 3 and 4 under 35 USC 103(a) as being unpatentable over Munks et al. in view of Mooradian and in further view of Camparo et al. As noted above, Munks et al. fail to teach the wavelength measuring module of the present invention, which includes a wavelength measuring module having a target wavelength corresponding to the tuning voltage applied

across a top electrode and a bottom electrode of the tunable laser. Mooradian and Comparo et al. fail to supply this missing teaching. Inasmuch as claims 3 and 4 depend either directly or ultimately from independent claim 1, claims 3 and 4 are believed to be allowable for the above-identified reasons. Accordingly, allowance of claims 3 and 4 is respectfully requested.

On account of the foregoing, claims 1-6 are believed to be in condition for allowance. Early and favorable reconsideration is therefore respectfully solicited.

In the event that any additional fees may be required to be paid in connection with this matter, please charge the same, or credit any overpayment, to Deposit Account No. 16-0221.

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July 24, 2003

(DATE OF DEPOSIT)

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(NAME OF ATTORNEY)

(SIGNATURE)

July 24, 2003

(DATE OF SIGNATURE)

Respectfully submitted,

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